

**REMARKS**

Claims 1-22 stand rejected under 35 USC 103(a) on Ohba (U.S. Patent No. 6,323,666) in view of Van Loan (U.S. Patent No. 5,247,246). Applicant respectfully traverses this rejection.

Claim 1 recites, “A testing method for testing contacting between a semiconductor chip and a carrier, comprising: loading the carrier with the semiconductor chip, wherein the contacting between the carrier and the semiconductor chip is tested immediately after the loading of the carrier with the semiconductor chip, and *wherein the semiconductor chip comprises one or more contacting test contacts exclusively for testing the contacting between the semiconductor chip and the carrier.*” (Emphasis added.)

The Examiner has conceded that Ohba does not disclose a semiconductor chip comprising one or more contacting test contacts exclusively for testing a contacting between the semiconductor chip and a carrier, instead asserting that such a feature is disclosed in Van Loan. Applicant respectfully disagrees.

Van Loan discloses in integrated circuit (hereinafter, “IC”) chip 194 having a plurality of contacts (terminals), wherein the IC chip 194 is mounted in a cavity 196 of a carrier 190. The carrier 190 has a plurality of metal leads 198 which are connected to a corresponding contact of the IC chip 194 by individual metal wires 200 (Figs. 25 and 26; col. 20, line 18, through col. 21, line 2). The metal leads 198 are also connected to test access pads 204 located on the top surface of the carrier 190 (col. 20, lines 41-43).

While the test pads 204, may be used exclusively for testing, the IC chip of Van Loan does not comprise these test pads 204; the test pads are separate devices located on the top surface of the cover 202 of the carrier 190 and are not part of the IC chip 194. Accordingly, the test pads 204 are not contacts as recited in claim 1.

Additionally, unlike the contacts recited in claim 1, the IC chip contacts of Van Loan are not used, “exclusively for testing the contacting between the semiconductor chip and the carrier,” nor

has the Examiner so asserted. The contacts disclosed in Van Loan are connected via the metal leads 198 to contacts on a printed circuit board 208 (col. 20, lines 62-65) and are used during the ordinary operation of the integrated circuit chip 194.

Because the test pads 204 are not part of the IC chip disclosed in Van Loan, they can not, and do not, disclose or suggest the above discussed feature of claim 1. Furthermore, the IC chip contacts of Van Loan are not used exclusively for testing. Accordingly, the combination of Ohba and Van Loan fail to disclose or suggest all of the features recited in claim 1, which is therefore allowable.

Claim 12 recites features substantially similar to those of claim 1, and is therefore also allowable for the reasons stated above. Claims 2-11 and 13-24 depend from allowable claims and are therefore allowable due at least to their respective dependencies.


Claims 23 and 24 have been added to round out the scope of the claims.

Applicant solicits an early Action allowing the claims.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, applicant petitions for any required relief, including extensions of time, and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing Attorney Docket No. **543822002400**.

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Respectfully submitted,

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